

## PROCEEDINGS OF LEARNED SOCIETIES.

## ZOOLOGICAL SOCIETY.

February 9, 1841.—William Horton Lloyd, Esq. in the Chair.

A letter from P. C. Blackett, Esq., dated January 27, 1841, was read. It relates to the parent stock of the domestic Dog (*Canis familiaris* of authors), and gives some account of the habits of the European Wolf. The pups of this animal, it is said, were considered valuable about sixty or seventy years back, and that they were easily domesticated, and became as familiar and attached to their master as the common domesticated Dog.

A monograph on the genus *Nematoptera*, by J. O. Westwood, Esq., F.L.S., was read.

In this monograph numerous new species are added to those already characterized by Dr. Klug and others. The genus *Nematoptera* (*Nemoptera*, Latr.) was placed by its founder, Latreille, in the family *Panorpidæ*, owing to the rostrum being elongated as in that family; but Mr. Westwood agrees with Drs. Klug and Burmeister, in arranging the species in the *Hemerobiidæ*, since they agree with this family, not only in the structure of the mouth, but also in the general arrangement of the nervures of the wings.

Following are the chief characters of the species:—

Sectio 1<sup>ma</sup>.

Alæ anticæ latissimæ ovatæ, coloratæ, serie duplici vel triplici cellularum in area anali.

Sp. 1. NEMATOPTERA PETIVERI. *Nem. alis anticis ovatis, pallide flavis; fasciis quatuor sinuatis; costa ad basin immaculata; macula oblonga ante mediam, altera media tertique subapicali, nigris, punctisque nonnullis versus marginem internum et in discum alæ ejusdem coloris.*

Expans. alar. antic. 2—2½ unc. Long. alar. postic. 1¾—1⅝ unc.

Syn. The Feather-tailed Smyrna Adderbolt, *Petiver*, *Gazoph.* tab. 73. f. 11.

Phryganea e Moldavia, *Linnaeus*, *Kongl. Vetensk. Handl.* 1747. p. 176—178. tab. 6. fig. 1.

Ephemera Coa, *Hasselquist*, *Iter Palæstinum*, p. 423. (1757).

Panorpa Coa, *Linnaeus*, *Syst. Nat.* Edit. x. Ditto, Edit. xii. vol. ii. p. 915. *Fabricius*, *Syst. Ent.* p. 314. *Ent. Syst. Suppl.* p. 208.

Panorpa halterata, *Fabr.* *Mantiss. Ins.* p. 251.

Nemoptera sinuata, *Olivier*, *Enc. Méth.* viii. p. 178. *Lamarck*, *Hist. Nat.* iv. p. 419. *Klug*, *Monogr. Panorp.* p. 13. No. 2.

Sp. 2. NEMATOPTERA COQUEBERTII. *Nem. alis anticis latissimè ovatis, pallidiori-flavescentibus; fasciis tribus valde sinuatis; costa in areas angustas divisa, singula area linea obscura notata, macula media costali, altera intermedia, 3tiæque versus apicem costæ obscuris; disco et basi punctis numerosis nigris; areaque anali lata duplici serie punctorum et unica strigarum nigrarum.*

Expans. alar. antic. 1½—1⅝ unc. Long. alar. postic. 1½ unc.

Syn. *Panorpa Coa*, *Coquebert*, Illustr. iconogr. i. p. 15. tab. 3. fig. 3.

*Nemoptera Coa*, *Olivier*, Enc. Méth. tom. viii. p. 178. *Klug*? Mon. Panorp. p. 12. No. 1. *Burmeister*? Handb. d. Entomol. ii. p. 987.

*Nemoptera lusitanica*, *Rambur*. Faune Andal. tom. ii. pl. 9. f. 1.

The extraordinary breadth of the fore-wings (which are as broad as those of the preceding species, although of considerably less expanse) is alone sufficient to distinguish this from the two other species of this Section.

Sp. 3. NEMATOPTERA BIPENNIS. *Nem. alis anticis latis, margine antico ferè recto; latè flavis, brunneo variis; punctis numerosis fasciisque tribus valdè sinuatis brunneis ornatis; costa in cellulas quadratas divisa; singula cellula puncto rotundo notata; macula oblonga paullò pone medium costæ apiceque toto brunneis, et in hoc apice macula parva subcostalis elongata alteraque magna ovalis, area anali serie unica pinctorum alteraque strigarum.*

Expans. alar. antic. 2—2½ unc. Long. alar. postic. 1¾—1⅞ unc.

Syn. *Panorpa bipennis*, *Illig.* Ahrens Faun. Ins. Eur. i. 16.

*Nemoptera lusitanica*, *Leach*, Zool. Misc. ii. tab. 85. fig. sup. *Klug*, Monogr. Panorp. p. 13. *Burmeister*, Handb. d. Ent. ii. p. 987. Nec *Rambur*. Faun. Andalusia. ii. pl. 9. f. 1.

*Nemoptera Coa*, *Latr.* Hist. Nat. Crust. et Ins. t. xiii. pl. 97. bis fig. 2. Gen. Crust. iii. p. 186. *Savigny*, Descr. de l'Égypte, Neur. pl. 2. fig. 15.

*Diptita lusitanica*, *Hoffm.* MSS. quoted by *Leach*.

This species (to which I have restored *Illiger*'s specific name, which has been overlooked by all subsequent authors, although several years prior to *Leach*'s) is at once distinguished from the two preceding species by the shape of the fore-wings, of which the anterior margin is almost straight, at least for two-thirds of the length of the wing; they are consequently not so greatly dilated as in the two preceding. The colour of the wings is also of a much richer yellow, and the markings are fine brown, instead of obscure black.

### Section 2<sup>da</sup>.

*Alæ anticæ angustiores hyalinæ; serie unica cellularum oblongarum in area anali.*

#### Subsection 1.

*Alæ posticæ pone medium subitò bis aut semel dilatatæ.*

Sp. 4. NEMATOPTERA EXTENSA. *Nem. alis anticis hyalinis; costa paullò obscuriori punctoque minuto fusco supra conjunctionem venæ mediastinæ cum postcostali; alis posticis ante apicem apiceque rotundato, valdè extensis et infuscatis.*

Expans. Alar. antic. 1½ unc. Long. alar. postic. 1½ unc.

Syn. *N. extensa*, *Olivier*, Enc. Méth. viii. p. 178. *Guerin*, Icon. d.

Règne An. Ins. pl. 61. f. 1. *Klug*, Monogr. Panorp. p. 13.

*Burmeister*, Handb. d. Ent. ii. p. 987.

The short description given above is taken from a specimen in my collection, which was captured by *Olivier* himself near Bagdad, and for which I am indebted to my friend *Audouin*.

Sp. 5. NEMATOPTERA DILATATA. *Nem. fusco-brunnea; alis anticis hyalinis; posticis ante apicem biextensis fuscis; apice angusto lacteo.*

Expans. alar. antic. 2 unc. Long. alar. postic.  $1\frac{7}{10}$  unc.

Syn. *N. dilatata*, Klug, Monogr. Panorp. p. 14. tab. annex. fig. 1. Burmeister, Handb. ii. p. 987.

This very distinct species has the hind wings comparatively short, with the expansions considerably larger than in *N. extensa*. It is from South Africa.

Sp. 6. NEMATOPTERA FORSKALLII. *Nem. alis anticis hyalinis, vena postcostali flava; alis posticis "triclavatis"; stylo flavo; clava 1<sup>ma</sup> fusco-flavescenti; 2<sup>da</sup> dimidio minori cærulea; 3<sup>tia</sup> terminali oblonga cærulea; apice extimo obtuso.*

"Corp. long. poll." Alæ posticæ, "3 poll. vel corpore triplò longiores."

Syn. *Panorpa halterata*, Forskall, Descr. Anim. p. 97. tab. 25. fig. E. (copied in Encycl. Méth. pl. 98. fig. 1., under the name of *Panorpe d'orient*).

Nec *N. halterata*, Fabr., Olivier, Dumeril, Klug.

Sp. 7. NEMATOPTERA BARBARA. *Nem. alis erectis pallidis; costa late fusca; posticis linearibus longissimis subbiclavatis nigris apice dilatatis in medio coarctatis; fasciis tribus albis, intermedia minori.*

Syn. *Panorpa Coa*, Fabricius, Mantiss. Ins. i. p. 251.

*Panorpa halterata*, Fabricius, Ent. Syst. Suppl. p. 208.

*Nemoptera barbara*, Klug, Monogr. Panorp. p. 14.

Sp. 8. NEMATOPTERA PALLIDA. *Nem. alis anticis hyalinis immaculatis venis fulvescentibus punctoque minuto stigmatici albo; posticis longissimis linearibus albis apice vix latioribus, fascia tamen fusca dilatata pone medium alæ.*

Expans. Alar. antic.  $1\frac{9}{10}$  unc. Long. alar. postic.  $1\frac{2}{2}$  unc.

Syn. *N. pallida*, Olivier, Enc. Méth. viii. p. 179.

*N. halterata*, Klug, Monogr. Panorp. p. 14?.

#### Subsectio 2.

Alæ posticæ absque dilatatione.

#### (a.) Fasciatae.

Sp. 9. NEMATOPTERA AFRICANA. *Nem. corpore luteo, brunneo vario; alis anticis apice rotundatis hyalinis; spatio inter venam mediatinam et postcostalem luteo; his venis fulvo-testaceis, umbra fusciscenti apicali post stigma albidum; alis posticis basi pallidioribus; fascia fusca ante apicem album.*

Expans. alar. antic. 2 unc. Long. alar. postic.  $2\frac{1}{8}$  unc.

Syn. *Nemopteryx africana*, Leach, Zool. Misc. vol. ii. p. 74. tab. 85. fig. inf.; Griffith, Animal Kingd. vol. xv. p. 324. pl. 105. fig. 4.

Sp. 10. NEMATOPTERA BACILLARIS. *Nem. pallida, dorso brunnea vario; alis hyalinis, anticis (apice angustioribus subacutis) costa pallida, ad apicem infuscuta; stigmatibus albo; posticis linearibus longissimis, basi pallidis, ante apicem latè fuscis; antennis longitudine alarum anticarum.*



Expans. alar. antic.  $2\frac{1}{8}$  unc. Long. alar. postic.  $2\frac{1}{2}$  unc.

Syn. *N. bacillaris*, *Klug*, Monogr. Panorp. p. 15. tab. annex. fig. 2. *Burmeister*, Handb. d. Ent. ii. p. 986.

Sp. 11. NEMATOPTERA LATIPENNIS. *Nem. rufo-testacea*; *linea dorsali media fusca*; *alis anticis dilatatis rotundatis*; *umbra cinerea post stigma album*; *posticis in basi rufescentibus*; *fascia fusca ante apicem album*.

Long. corp. 6''' ; alar. antic. 10'''.

Syn. *N. latipennis*, *Burmeister*, Handb. d. Ent. ii. p. 986.

This species inhabits South Africa, and is described by *Burmeister* from the Museum of Halle.

Sp. 12. NEMATOPTERA ANGULATA. *Nem. pallida, brunneo varia*; *antennis fuscis longitudine alarum anticarum*; *alis anticis apice angulatis, hyalinis*; *vena mediastina et postcostali fulvis (spatio intermedio luteo)*, *punctoque parvo in cellula singula areæ costalis fulvo*; *stigmatè fusco*; *alis posticis longissimis ferè linearibus, dimidio basali brunneo*; *fascia lata ante apicem album fusca*.

Expans. alar. antic.  $2\frac{1}{4}$  unc. Long. alar. postic.  $2\frac{1}{2}$  unc.

Syn. *Nemoptera angulata*, *Westw.* in Trans. Ent. Soc. vol. i. Journal of Proceedings, p. 75.

Inhabits South Africa.

Sp. 13. NEMATOPTERA COSTALIS. *Nem. lutea, brunneo varia*; *antennis luteo-fulvis, alis anticis multò brevioribus*; *alis anticis apice rotundatis hyalinis*; *vena mediastina et postcostali fulvis (spatio intermedio luteo)*, *punctoque parvo in cellula singula areæ costalis fulvo*; *stigmatè fusco*; *nubila apicali alba, internè umbra tenui lutea marginata*; *alis posticis albidis ad basin fuscescentibus*; *fascia fusca ante apicem album*.

Expans. alar. antic. 2 unc. Long. alar. postic.  $2\frac{1}{8}$  unc.

Syn. *N. costalis*, *Westw.* in Trans. Ent. Soc. i. LXXV.

Inhabits South Africa.

Sp. 14. NEMATOPTERA OLIVIERII. *Nem. corpore testaceo brunneo-que variegato*; *alis hyalinis*; *anticis valdè angustis*; *costa pallidè fusca, lineaque (areæ costali posticè conjuncta) tenui stigmatèque albidis*; *posticis linearibus basi fasciæque testaceis*.

Expans. alar. antic.  $1\frac{1}{4}$  unc.

Syn. *N. halterata*, *Olivier*, Enc. Méth. viii. p. 178. (nec *Forskallii*).

*N. costata*, *Klug*, Monogr. Panorp. p. 14.

(b.) Alæ posticæ setaceæ haud fasciatæ.

Sp. 15. NEMATOPTERA SETACEA. *Nem. pallida*; *dorso pedibusque fuscescentibus*; *alis anticis hyalinis, ad apicem subinfuscatis macula alba*; *posticis setaceis apice albis*.

Long. corp. lin. 6. Expans. alar. antic. 12—13 lin.; alar. postic. 14—15 lin.

Syn. *Nemoptera setacea*, *Klug*, Monogr. Panorp. p. 15. tab. annex. f. 3. *Burmeister*, Handb. d. Ent. ii. p. 986.

Inhabits South Africa.

Sp. 16. NEMATOPTERA CAPILLARIS. *Nem. pallida*; *dorso luteo va-*

rio ; alis anticis hyalinis, nervis fusco alboque variegatis, reticulatis ; macula ad marginem anticum ante-apicali alba ; posticis longissimis setaceis albis ; basi hyalinis reticulatis.

Long. corp. lin. 4. Expans. alar. antic.  $10\frac{1}{2}$  lin. Long. alar. postic.  $13\frac{1}{2}$ .

Syn. *N. capillaris*, Klug, Monogr. Panorp. p. 16. tab. annex. fig. 4. Burmeister, Handb. d. Entomol. ii. p. 985.

Inhabits Arabia.

Sp. 17. NEMATOPTERA ARISTATA. *Nem. albida* ; alis albo-hyalinis ; anticis macula ante-apicali fusca ; posticis setaceis.

Long. corp. lin.  $2\frac{1}{2}$ .

Expans. alar. antic. 9. Long. alar. postic.  $7\frac{1}{4}$ .

Syn. *Nem. aristata*, Klug, Monogr. Panorp. p. 16. tab. annex. fig. 5. Burmeister, Handb. d. Ent. ii. p. 985.

Inhabits Ambukohl.

Sp. 18. NEMATOPTERA ALBA. *Nem. alba immaculata* ; oculis solùm nigris ; alis anticis hyalinis, venis albidis ; posticis longis setaceis et coloris albi paulld obscuri.

“ 7 ou 8 lignes de largeur les ailes étendues,” Oliv.

Syn. *Nem. alba*, Olivier, Enc. Méth. viii. p. 179. Klug, Monogr. Panorp. p. 16.

Inhabits Bagdad. Found in the houses in the evenings of May.

Sp. 19. NEMATOPTERA FILIPENNIS. *Nem. luteo-fusca* ; alis anticis albo-hyalinis ; stigmatè fusco ; posticis longissimis, basi nigris, antibus latioribus ; apice albo filiformi.

Long. corp. lin.  $3\frac{1}{2}$ . Expans. alar. antic. lin.  $11\frac{1}{2}$ . Long. alar. postic. 1 unc. 3 lin.

Habitat in India orientali. In Mus. D. W. W. Saunders, F.L.S.

Mr. Gould exhibited to the Meeting fine specimens, male and female, of the *Macropus laniger* of Quoy and Gaimard, and a species of *Hypsiprymnus* nearly allied to the *H. minor*, but which differs considerably in the form of the skull, and especially in having the muzzle broader, the sides being swollen ; it also differs from *H. minor* in having the tail and tarsi proportionally shorter. This species being new, Mr. Gould characterized it as follows, under the name

HYPSIPRYMNUS GILBERTII. *Hyps. colore corporis supernè e cinereo, fusco, nigroque commixtis, lined nigrescente a naso ducta cum colore frontis se intermiscente ; corpore subtùs e cinereo albo.*

	unc. lin.	
Longitudo ab apice rostri ad caudæ basin. . . .	16	0
caudæ. . . . .	6	3
tarsi . . . . .	3	0

This species was procured by Mr. Gould's assistant, Mr. Gilbert, at King George's Sound.

The following two papers, being a continuation of the descriptions of Mr. Cuming's shells, were read.

The first of these papers is by W. J. Broderip, Esq.

BULINUS MACULIFERUS. *Bul. testâ plerumque sinistrorsâ, elongato-*